ABSTRACT OF THE DISCLOSURE

Compositions and methods to promote nerve regeneration or to confer neuroprotection and prevent or inhibit neuronal degeneration within the nervous system, either the central nervous system or the peripheral nervous system, are provided. Treatment involves administering NS-specific activated T cells, or an NS-specific antigen or analog thereof, a peptide derived therefrom or an analog or derivative of said peptide, or a nucleotide sequence encoding said antigen or peptide, or any combination thereof.